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Waste Tank Summary Report for Month Ending May 31, 2005

Prepared for the U.S. Department of Energy Assistant Secretary for Environmental Management

CH2MHILL

Hanford Group, Inc.

Richland, Washington

Contractor for the U.S. Department of Energy
Office of River Protection under Contract DE-AC27-99RL14047

Approved for Public Release; Further Dissemination Unlimited

WASTE TANK SUMMARY REPORT FOR MONTH ENDING MAY 31, 2005

AN Naiknimbalkar

CH2M HILL HANFORD GROUP, INC.

Richland, WA 99352

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Waste Tank Summary Report for Month Ending May 31, 2005

A. N. Naiknimbalkar CH2M HILL Hanford Group, Inc.

Date Published July 2005

Prepared for the U.S. Department of Energy Assistant Secretary for Environmental Management



Richland, Washington

Contractor for the U.S. Department of Energy Office of River Protection under Contract DE-AC27-99RL14047

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ACRONYMS

BBI Best Basis Inventory

CH2M HILL CH2M HILL Hanford Group, Inc.
DCRT Double-Contained Receiver Tank
DIL Drainable Interstitial Liquid
DLR Drainable Liquid Remaining

DST Double-Shell Tank

FSAR Final Safety Analysis Report effective October 18, 1999

Gal Gallon

GPM Gallons Per Minute
ILL Interstitial Liquid
Kgal Kilogallons
IS Interim Stabilized

MT/FIC/ Manual Tape, Food Instrument Corporation, ENRAF Corporation (surface level measurement

ENRAF devices)

OSD Operating Specifications Document

PFP Plutonium Finishing Plant

SHMS Standard Hydrogen Monitoring System

SST Single-Shell Tank
SWL Salt Well Liquid

TMACS Tank Monitor and Control System

TPA Hanford Federal Facility Consent and Compliance Order, "Washington State Department of

Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy," as amended

(Tri-Party Agreement)

TSR Technical Safety Requirement

TWINS Tank Waste Information Network System

USQ Unreviewed Safety Question

GLOSSARY

General

<u>Characterization</u> - Characterization is understanding the Hanford tank waste chemical, physical, and radiological properties to the extent necessary to ensure safe storage and interim operation, and ultimate disposition of the waste.

<u>Drainable Interstitial Liquid (DIL)</u> -Drainable Interstitial Liquid is calculated based on saltcake and sludge volumes, calculated porosity values. Interstitial liquid is the liquid that fills the interstitial spaces of the solids waste. The sum of the interstitial liquid contained in saltcake and sludge minus an adjustment for capillary height is the initial volume of DIL. Interstitial liquid that is not held in place by capillary forces will, therefore, migrate or move with gravity.

<u>Drainable Liquid Remaining (DLR)</u> - The total Drainable Liquid Remaining is the sum of drainable interstitial liquid and supernatant.

<u>Supernatant Liquid</u> - The liquid above the solids or in large liquid pools covered by floating solids in waste storage tanks.

<u>Total Waste</u> - For purposes of this document, solids volume (sludge and saltcake including liquids) plus supernatant liquid.

<u>Waste Tank Safety Issue</u> - A potentially unsafe condition in the handling of waste material in underground storage tanks that requires corrective action to reduce or eliminate the unsafe condition. There are currently no waste tank safety issues.

Interim Stabilization (Single-Shell Tanks only)

Interim Stabilized (IS) - A tank which contains less than 50 Kgallons of drainable interstitial liquid and less than 5 Kgallons of supernatant. If the tank was jet pumped to achieve interim stabilization, then the jet pump flow or saltwell screen inflow must also have been at or below 0.05 gpm before interim stabilization criteria are met.

<u>Jet Pump</u> - The centrifugal pump and jet assembly are needed to pump the interstitial liquid from the saltwell screen into the pump pit, nominally a 40-foot elevation rise. Pumping rates vary from 0.05 to about 4 gpm.

<u>Saltwell Screen</u> - The saltwell system is a 10-inch diameter saltwell casing consisting of a stainless steel saltwell screen welded to a Schedule 40 carbon steel pipe. The casing and screen are to be inserted into the 12-inch tank riser located in the pump pit. The stainless steel screen portion of the system will extend through the tank waste to near the bottom of the tank.

Retrieval/Closure-(Single-Shell Tanks only)

<u>Closure (C)</u> - Final closure of the operable units (tank farms) shall be defined as regulatory approval of completion of closure actions and commencement of post-closure actions. For the purposes of this agreement (Hanford Federal Facility Agreement and Consent Order Change Control Form, Change Number M-45-02-03), all units located within the boundary of each tank farm will be closed in accordance with Washington Administrative Code 173-303-610.

<u>Retrieval (R)</u> - The process of removing, to the maximum extent practical, all the waste from a given underground storage tank. The retrieval process is selected specific to each tank and accounts for the waste type stored and the access and support systems available. Generally, retrieval is focused on removal of solids from the tank.

Tank Integrity

<u>Assumed Leaker</u> - The integrity classification of a waste storage tank for which surveillance data indicate a loss of liquid attributed to a breach of integrity.

<u>Sound</u> - The integrity classification of a waste storage tank for which surveillance data indicate no loss of liquid attributed to a breach of integrity.

Surveillance Instrumentation

<u>Annulus</u> - The annulus is the space between the inner and outer shells on <u>DSTs</u> only. Drain channels in the insulating and/or supporting concrete carry any leakage to the annulus space where conductivity probes are installed. The annulus conductivity probes and radiation detectors are the primary means of leak detection for all DSTs.

<u>Automatic FIC</u> - An automatic waste surface level measurement device is manufactured by the Food Instrument Corporation (FIC). The instrument consists of a conductivity electrode (plummet) connected to a calibrated steel tape, a steel tape reel housing and a controller that automatically raises and lowers the plummet to obtain a waste surface level reading. All FIC gauges are read manually. FICs are being replaced by ENRAF detectors (see below).

<u>Drywells</u> - Historically, the drywells were monitored with gross logging tools as part of a secondary leak monitoring system. In some cases, neutron-moisture sensors were used to monitor moisture in the soil as a function of well depth, which could be indicative of tank leakage. The routine gross gamma logging data were stored electronically from 1974 through 1994; a program was initiated in 1995 to log each of the available drywells in each tank farm with a spectral gamma logging system. The spectral gamma logging system provides quantitative values for gamma-emitting radionuclides. The baseline spectral gamma logging database is available electronically.

Spectral drywell scans can be run by special request. A select subset of drywells is routinely monitored by the Vadose Zone Characterization Project to assess movement of gamma-emitting radionuclides in the subsurface.

ENRAF 854 ATG Level Detector - FICs and some manual tapes are in the process of being replaced by the ENRAF ATG 854 level detector. The ENRAF gauge, fabricated by ENRAF Incorporated, determines waste level by detecting variations in the weight of a displacer suspended in the tank waste. ENRAFs and future installations will transmit digital level data to TMACS via an ENRAF Computer Interface Unit (CIU). The CIU allows fully remote communication with the gauge, minimizing tank farm entry.

<u>Laterals</u> - Laterals are horizontal drywells positioned 8 to 10 feet under single-shell waste storage tanks, 3 per tank, to detect radionuclides in the soil which could be indicative of tank leakage. These drywells can be monitored by radiation detection probes. Laterals are located only in A and SX farms. There are currently no functioning laterals and no plan to prepare them for use.

Liquid Observation Well (LOW) - In-tank liquid observation wells are used for monitoring the ILL in single-shell tanks. The wells are usually constructed of fiberglass or TEFZEL-reinforced epoxy-polyester resin (TEFZEL is a trademark of E. I. du Pont de Nemours & Company). A few LOWs constructed of steel. Gamma and neutron probes are used to monitor changes in the ILL, and can indicate intrusions or leakage by increases or decreases in the ILL. There are 70 LOWs installed in SSTs that contain or are capable of containing greater than 50 Kgallons of drainable interstitial liquid. All of the LOWs are monitored weekly with the exception of TX-108 which is monitored by request only. Two LOWs installed in DSTs SY-102 and AW-103 are used for special, rather than routine, surveillance purposes only.

<u>Surface Levels</u> - The surface level measurements in all waste storage tanks are monitored by manual or automatic conductivity probes, and recorded and transmitted or entered into the Surveillance Analysis Computer System.

<u>Thermocouple (TC)</u> - A thermocouple is a thermoelectric device used to measure temperature. More than one thermocouple element on a device (probe) is called a thermocouple tree.

METRIC CONVERSION CHART

METRIC CONVERSION CHART				
1 inch	=	2.54 centimeters		
1 foot	н	30.48 centimeters		
1 gallon	=	3.79 liters		
1 ton	=	0.91 metric tons		

$$^{\circ}F = \left(\frac{9}{5} \,^{\circ}C\right) + 32$$

1 Btu/h = 0.2931 watts (International Table)

1.0 PURPOSE AND SCOPE

This report is the official inventory for radioactive waste stored in underground tanks in the 200 Areas at the Hanford Site. Data that depict the status of stored radioactive waste and tank vessel integrity are contained within the report. This report provides data on each of the existing 177 large underground waste storage tanks and 60 smaller miscellaneous underground storage tanks and special surveillance facilities, and supplemental information regarding tank surveillance anomalies and ongoing investigations. This report is intended to meet the requirement of U.S. Department of Energy Order 435.1 (DOE-HQ, August 28, 2001, Radioactive Waste Management, U.S. Department of Energy-Washington, D.C.) requiring the reporting of waste inventories and space utilization for the Hanford Site Tank Farm tanks.

2.0 WASTE TANK STATUS

Note: Changes from the previous month are in **bold print**.

Double-Shell Tanks (DST)	28 double-shell	10/86 - date last DST tank was completed
Single-Shell Tanks (SST)	149 single-shell	1966 - date last SST tank was completed
Assumed Leaker Tanks	67 single-shell	07/93 - date last Assumed Leaker was identified
Sound Tanks	28 double-shell 82 single-shell	1986 - date DSTs determined sound 07/93 - date last SST determined sound
Interim Stabilized Tanks ^a (IS)	149 single-shell	03/04 - date last IS occurred ^a
Retrieval ^b	13 single-shell	03/05 - date last Retrieval completed
Misc. Underground Storage Tanks (MUST) and Special Surveillance Facilities (Active)	10 Tanks East Area 7 Tanks West Area	03/01 - last date a tank was added or removed from MUST list
Misc. Underground Storage Tanks (IMUST) and Special Surveillance Facilities (Inactive) ^c	18 Tanks East Area 25 Tanks West Area	11/01 - last date a tank was added or removed from IMUST list

Footnotes:

Saltwell pumping for the tanks covered by the Consent Decree was completed in March 2004. (Tank C-106 is not included in the Consent Decree and is not Interim Stabilized; Retrieval was completed December 31, 2003). Interim Stabilization documentation has not yet been completed on one tank: BY-106. The Consent Decree table and footnotes have been removed from this document; all actions in this decree have been completed.

^a Tanks are declared Interim Stabilized when pumping stops; the tank may be placed in evaluation at this time. Tank U-108 was placed in evaluation on March 18, 2004, due to major equipment failure; documentation was completed August 16 and the declaration letter sent to DOE-RL on September 8, 2004.

Tank status for C-104, C-201, C-202, C-203, C-204, S-102, S-103, S-105 and S-106 was changed to "Retrieval," effective October 2002. Tank status for C-103, C-105, C-106, and S-112 was changed to "Retrieval" in October 2003. Retrieval was completed for tank C-106 on December 31, 2003. Retrieval was completed for tank C-203 on March 24, 2005, letter issued to DOE on March 31, 2005. Hanford Federal Facility Agreement and Consent Order (signed August 2004) modified Milestone M-45-00C (Change Order M-45-04-01) changing the regulatory requirements for retrieval of waste in tanks S-103, S-105, and S-106. "Retrieval" status in these tanks is thereby rescinded to allow focusing on the retrieval of wastes and the interim closure of all Waste Management Area C-Farm Single-Shell Tanks.

^c Tables 5-2. and 5-3., the Inactive Miscellaneous Underground Storage Tanks (IMUST) now reflect only those tanks managed by CH2M HILL Hanford Group, Inc. (CH2M HILL).

2.1 WASTE TANK STATUS HIGHLIGHTS

Table 2-1. Single-Shell Tanks in Retrieval Status

Tank Number	Comments
241-C-101	
241-C-102	
241-C-103	
241-C-104	
241-C-105	
241-C-106	Declared "Retrieval Completed," December 31, 2003
241-C-107	
241-C-108	
241-C-109	
241-C-110	
241-C-111	
241-C-112	
241-C-200 series	C-203- Declared "Retrieval Completed," March 24, 2005
241-S-102	Retrieval initiated on December 17, 2004
241-S-103	Status rescinded by HFFACO, August 2004
241-S-105	Status rescinded by HFFACO, August 2004
241-S-106	Status rescinded by HFFACO, August 2004
241-S-112	Retrieval in progress

Table 2-2. Single-Shell Tanks Declared Interim Stabilized (confirmation letter to DOE not yet sent)

Tank Number	Comments
241-BY-106	December 31, 2003 (in evaluation)

<u>Tank AX-103</u>

The interstitial liquid level (ILL) readings are taken quarterly via neutron probe in a liquid observation well (LOW) in this tank. On December 12, 2004, the LOW reading indicated a 2.7-inch decrease from the previous reading (July 5); a repeated reading on December 16 confirmed the decrease. Problem evaluation report (PER)/Occurrence Report RP 2004-0070 "Tank 241-AX-103 Liquid Waste Level Below Established Baseline" was issued.

The LOW reading frequency was increased to weekly. An Assessment team was formed and the assessment process initiated per TFC-ENG-CHEM-D-42, "Tank Leak Assessment Process." The LOW level has increased from the December 12 reading. The LOW level continues to fluctuate with most readings within the tolerance limit of the baseline. Preliminary analysis indicates that the ILL LOW readings are responding to changes in barometric pressure.

The surface level (ENRAF) has shown no change. A level reading in the leak detection pit was obtained on March 31, 2005. The leak detection pit reading showed no increase that would be indicative of a tank leak.

Three of the drywells surrounding AX-103 were logged on March 1 and 2, 2005. All seven drywells surrounding have been logged since January 1, 2005 and the readings show no evidence of any anomalous increase in gamma activity that would be indicative of a tank leak.

The assessment team met on April 20, 2005 and reached a consensus that a leak from tank AX-103 was highly unlikely. Tank 241-AX-103 Leak Assessment Report, RPP-RPT-26501 is being prepared to document the assessment.

Tank S-111

Letter for completion of interim stabilization of single-shell tank 241-S-111 sent to DOE-RL on May 26, 2005.

3.0 DOUBLE-SHELL TANKS MONTHLY SUMMARY TABLES

Table 3-1. Inventory and Status by Tanks - Double-Shell Tanks.

	All volu	me data obta	ined from	l'ank Waste I	nformation Netw	•		
					Was	ste Volumes		
Tank	Tank Integrity	Tank Level (inches)	Total Waste (Kgal)	Available Space (Kgal)	Supernatant Liquid (Kgal)	Sludge (Kgal)	Saltcake (Kgal)	Solids Volume Update
			<u>241-</u> /	N TANK FAR	M STATUS			
AN-101	SOUND	348	957	187	926	0	31	12/31/03
AN-102	SOUND	388	1068	76	914	0	154	01/01/0:
AN-103	SOUND	349	959	185	500	0	459	06/30/9
AN-104	SOUND	383	1053	91	608	0	445	06/30/99
AN-105	SOUND	410	1126	18	588	0	538	01/31/03
AN-106	SOUND	339	932	212	883	32	17	01/30/0
AN-107	SOUND	400	1101	43	871	0	230	12/31/0
7 TANKS - T	TOTAL		7196	812	5290	32	1874	
	·			AP TANK FAE				
AP-101	SOUND	406	1115	29	1115	. 0	0	05/01/89
AP-102	SOUND	399	1097	47	1074	23	0	05/31/02
AP-103	SOUND	325	893	251	893	0	0	05/31/96
AP-104	SOUND	399	1098	46	1098	0	0	10/13/88
AP-105	SOUND	414	1138	6	1049	0	89	06/30/99
AP-106	SOUND	412	1134	10	1134	0	0	10/13/88
AP-107	SOUND	123	339	805	339	0	0	10/13/88
AP-108	SOUND	375	1032	112	1032	0	0	10/13/88
8 TANKS - TOTAL 7846 1306 7734 23 89 241-AW TANK FARM STATUS								
AW-101	SOUND	410	241-A 1127	17	731	0	396	01/31/03
AW-101 AW-102	SOUND	202	555	570	548	7	0	03/31/0
AW-102 AW-103	SOUND	399	1097	47	784	273	40	07/21/04
AW-104	SOUND	390	1072	72	849	66	157	06/30/99
AW-105	SOUND	152	419	725	156	263	0	06/30/99
AW-106	SOUND	327	900	244	617	0	283	04/01/04
6 TANKS - T			5170	1675	3685	609	876	0 110 21 3
				AY TANK FAR			5,5	
AY-101	SOUND	65	179	822	83	96	ol	06/30/99
AY-102	SOUND	337	927	74	776	151	0	04/01/0
2 TANKS - 1	lotal.		1106	896	859	247	0	
			241-	AZ TANK FAF	M STATUS			
AZ-101	SOUND	321	883	118	. 831	52	0	06/30/9
AZ-102	SOUND	355	977	24	872	105	0	06/30/9
2 TANKS - T	TOTAL		1860	142	1703	157		
			241-	SY TANK FAR	M STATUS			
SY-101	SOUND	229	629	515	354	0	275	06/30/9
SY-102	SOUND	319	878	266	733	145	0	09/30/0
SY-103	SOUND	269	739	405	397	0	342	06/30/99
3 TANKS - T	ΓΟΤΑL		2246	1186	1484	145	617	

Notes:

1 Kgal differences are the result of computer rounding

Supernatant + Sludge (includes liquid) + Saltcake (includes liquid) = Total Waste

Available Space Volumes include restricted space

Tanks AN-103, AN-104, AN-105, AW-101, SY-101 and SY-103 contain retrained gas in the saltcake

Table 3-2. Double-Shell Tank Space Allocation, Inventory and Waste Receipts (all volumes in kgallons)

TOTAL DST CAPA	CITY
TOTAL=	31,441

TOTAL DST WASTE INVI	ENTORY
INVENTORY ON 5/31/05	25,424
INVENTORY ON 4/30/05	25,363
CHANGE =	61

ALLOCATION OF REMAINING DST S	DACE
ALLOCATION OF REMAINING DST 5	TACE
TOTAL DST CAPACITY =	31,441
WASTE INVENTORY =	-25,424
(*) DEDICATED OPERATIONAL SPACE =	-2,000
(**) RESTRICTED USAGE SPACE =	-1,710
(***)EMERGENCY SPACE ALLOCATION =	-1,200
REMAINING AVAILABLE SPACE =	1,107

- (*) Dedicated Operational Space is assumed to equal 2 Mgal for SST retrieval, cross-site transfer receiver, and evaporator feed and slurry.
- (**) Restricted space associated with flammable gas Waste Group A and tanks controlled for waste feed delivery per Feed Control List, HNF-SD-WM-OCD-015, Tank Farms Waste Transfer Compatibility report. These tanks are: AN-102, -103, -104, -105, -107; AP-101; AW-101, -103, -105; AY-102, and SY-102 is allowed to receive condensate only). Restricted Space does not include Feed Control List tanks AY-101, AZ-102, and SY-102, which are allowed to receive limited types of waste.
- (***) Emergency Space Allocation adjusted in July 2003 per HNF-3484 Rev. 4, includes space for WTP returns.

MAY DST WASTE RECEIPTS

FACILITY G	ENERATIONS	OTHER GAINS ASSO	CIATED WITH	OTHER LOSSES ASSO	OTHER LOSSES ASSOCIATED WITH								
222-S	.0	SLURRY	3	SLURRY	5								
TANK FARMS	15	CONDENSATE	6	CONDENSATE	7								
C-203	0	INSTRUMENTATION	0	INSTRUMENTATION	0								
S-102	13	MISCELLANEOUS GAINS	14	MISCELLANEOUS LOSSES	7								
S-112	16												
244-BX	13												
TOTAL	= 57	TOTAL=	23	TOTAL= 19									

WASTE RECEIPT AND EVAPORATOR METRIC

	DST WASTE	MISC, DST		NET DST	TOTAL DST
DATE	RECEIPTS	CHANGES (+/-)	WVR (1)	CHANGE	VOLUME
5/05 ·	57	4	0	61	25,424

(1) WVR is total (before flush) waste volume reduction for 242-A Evaporator

IMP	IMPLEMENTATION OF DST SPACE OPTIONS METRIC (TPA MILESTONE M-46-21)									
DATE	INITIATIVES	GAINS TO DATE (1)	GAINS DURING MONTH							
5/05	INCREASE DST FILL HEIGHT	0	0							
	NET EVAPORATOR WVR (2)	1830	0							
·	RESERVE EMERGENCY SPACE COMPLIANT WITH DOE 0435.1	1100	0							
	USE RESTRICTED HEADSPACE	0	0							
	TOTAL	2930	0							

- (1) DST tank space gains since 10/1/02.
- (2) WVR is net (after flush) waste volume reduction for 242-A Evaporator

4.0 SINGLE-SHELL TANKS MONTHLY SUMMARY TABLES

Table 4-1. Inventory and Status by Tanks - Single-Shell Tanks (sheet 1 of 4). All volume data obtained from Tank Waste Information Network System (TWINS)

				Waste Volumes							
				Super-	Drainable			Drainable			
			Total	natant	Interstitial	this	Total	Liquid		Salt-	Solids
Tank	Tank	Tank	Waste	Liquid	Liquid			Remaining	Sludge	cake	Volume
Number		Status	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	Update
Number	Integrity	Status	(Mgai)					(Kgai)	(Kgai)	(Kgai)	Opuate
	gorne	TO(4)	990		241-A TANK F					242	l 06/30/04
A-101	SOUND	IS(4)	320	0	37	0	543	37	3	317	
A-102	SOUND	IS IS	40 370	3	9 87	. 0	40	12 92	2	37 364	01/31/03
A-103 A-104	ASMD LKR ASMD LKR	IS	28	0	0	0	111 0	92	28	304	01/01/02 01/27/78
A-104 A-105	ASMD LKR ASMD LKR	IS	37	0	0	0	0	0	37	0	10/31/00
A-105 A-106	SOUND	IS	79	0	9	0	0	. 9	50	29	01/01/02
6 TANKS -		10	874	•		- 0			120	747	01/01/02
O IMMS -	· TOTAL		0/4		44 A ST / TE A NIT/ T	ATAL CODA	TIC		120	141	
AX-101	SOUND	IS	358	l 0	41-AX TANK F 44	AKM STAT	369	44	I з	355	12/31/03
AX-101 AX-102	ASMD LKR	IS	30	0	0	0	13	0	6	24	01/01/02
AX-102 AX-103	SOUND	IS	107	0	22	0	0	22	8	99	09/30/03
AX-104	ASMD LKR	IS	7	ŏ	0	0	0	0	7	ő	01/01/02
4 TANKS -			502		<u> </u>				24	478	01/01/02
	101.10		002		241-B TANK F.	ADM CTAT	rte			****	
B-101	ASMD LKR	IS	109	أ و ا	20	0	0.5	20	28	81	01/01/02
B-102	SOUND	IS	32	4	7	0	0	11	0	28	06/30/99
B-103	ASMD LKR	IS	56	ò	10	ŏ	ő	10	1	55	01/01/02
B-104	SOUND	IS	374	o	45	0	0	45	309	65	01/01/02
B-105	ASMD LKR	IS	290	0	20	0	0	20	28	262	01/01/02
B-106	SOUND	IS	123	1	8	0	0	9	122	. 0	12/31/03
B-107	ASMD LKR	IS	161	0	23	0	0	23	86	75	01/01/02
B-108	SOUND	IS	92	0	19	0	0	19	27	65	06/30/04
B-109	SOUND	IS	125	0	23	0	0	23	50	75	01/01/02
B-110	ASMD LKR	IS	245	1	27	0	0	28	244	0	01/01/02
B-111	ASMD LKR	IS	242	1	23	0	0	24	241	0	01/01/02
B-112	ASMD LKR	IS	35	3	2	0	0	5	15	17	01/01/02
B-201	ASMD LKR	IS	29	0	5	0	0	5	29	0	07/01/04
B-202	SOUND	IS	28	0	4	0	0	4	28	0	07/01/04
B-203	ASMD LKR	IS	50	1	5	0	0	6	49	0	07/01/04
B-204	ASMD LKR	IS	49	1	. 5	0	0	6	48	0	07/01/04
16 TANKS	- TOTAL		2040						1305	723	<u> </u>
D. T		*-	1	_	41-BX TANK F			. 1	1		I
	ASMD LKR	IS	48	0	4	0	0	4	48	0	
	ASMD LKR	IS	79 75	0	0	0	0	0	79	0	06/30/04
BX-103	SOUND	IS	75	13	4	0	0	15	62	0	01/01/83
BX-104 BX-105	SOUND SOUND	IS IS	100 72	3 5	4	0	17 15	7 9	97 42	0	01/01/02 01/01/05
BX-105	SOUND	IS	38	0	4	0	13	_		25	
BX-100 BX-107	SOUND	IS	347	0	37	0	23	4 37	10 347	28 0	01/01/05 09/18/90
	ASMD LKR	IS	347	0	4	0	23 0	4	347	0	09/18/90
BX-109	SOUND	IS	193	0	25	0	8	25	193	0	01/31/01
	ASMD LKR	IS	205	1	35	0	2	36	65	139	01/01/01
	ASMD LKR	IS	189	0	6	0	117	6	32	157	01/01/01
BX-112	SOUND	IS	164	1	9	0	4	10	163	0	01/01/02
12 TANKS			1541				 	10	1169	349	01/01/02

Table 4-1. Inventory and Status by Tank - Single-Shell Tanks (sheet 2 of 4).

Table 4-1. Inventory and Status by Tank - Single-Shell Tanks (sheet 2 of 4). All volume data obtained from Tank Waste Information Network System (TWINS)											
		All volu	ıme data o	obtained fro	m Tank Waste I			System (TW)	NS)		
							Volumes				
1				Super-	Drainable	Pumped		Drainable	l	~ 1.	a 11 1
l			Total	natant	Interstitial	this	Total	Liquid		Salt-	Solids
Tank	Tank	Tank	Waste	Liquid	Liquid		_	Remaining	Sludge	cake	Volume
Number	Integrity	Status	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	Update
D 57 4 04	SOUND	TC	270		241-BY TANK FAI		36	24	J 37	333	01/01/02
BY-101 BY-102	SOUND SOUND	IS IS	370 279	0	24 40	0	159	40	0	279	06/30/04
BY-102	ASMD LKR	IS	417		58	0	96	58	9	408	01/31/03
BY-104	SOUND	IS	358	ا	51	0	330	51	45	313	01/01/02
BY-105	ASMD LKR	IS	481	0	47	0	45	47	48	433	03/31/03
BY-106	ASMD LKR	IS	462	-	-	0	99	-	32	430	12/31/03
BY-107	ASMD LKR	IS	272	0	42	0	56	42	16	256	06/30/04
BY-108	ASMD LKR	IS	222	0	33	0	28	33	40	182	01/01/02
BY-109	SOUND	IS	287	0	37	0	157	37	24	263	06/30/04
BY-110	SOUND	IS	366	0	20	0	213	20	43 0	323	01/01/02 06/30/04
BY-111 BY-112	SOUND SOUND	IS IS	301 286	0	14 24	0	313 116	14 24	2	301 284	03/31/02
12 TANKS			4101		24		110	24	296	3805	03/31/02
12 IAUKS	- IOIAL		7101		241-C TANK FAR	M STATIS			250	3003	
C-101	ASMID LIKR	IS/R	88	l 0	4	0	0	4	88	0	11/29/83
C-102	SOUND	IS/R	316	0	62	0	47	62	316	0	09/30/95
C-103	SOUND	IS/R	75	4	10	0	114	11	71	0	12/31/03
C-104	SOUND	IS/R	259	0	29	0	0	29	259	0	01/01/02
C-105	SOUND	IS/R	132	0	10	0	0	10	132	0	02/29/00
C-106	SOUND	/R	3		npleted, 12/31/03	-	-	-	3	0	12/31/03
C 107	COLDED	TC/D	0.47		tote (1), page 18	•	44	20	247		06/30/04
C-107 C-108	SOUND SOUND	IS/R IS/R	247 66	0	30 4	0	41 0	30 4	247 66	0	06/30/04
C-108 C-109	SOUND	IS/R	63	0	4	0	0	4	63	0	06/30/04
C-110	ASMD LKR	IS/R	178	1	37	. 0	16	38	177	0	06/14/95
C-111	ASMD LKR	IS/R	57	0	4	0	0	4	57	0	06/30/04
C-112	SOUND	IS/R	104	0	6	0	0	6	104	0	09/18/90
C-201	ASMID LKR	IS/R	1	0	0	0	0	0	1	0	01/01/02
C-202	ASMID LKR	IS/R	0		iote (2), page 18	0	0	0	0	0	06/30/04
C-203	ASMID LKR	IS/R	0		mpleted, 03/24/05	•	•	•	0	0	03/24/05
C-204	ASMD LKR	IS/R	2	See Footi	10te (5), page 18	0	0	0	2	0	01/31/03
16 TANKS		15/15	1591						1586	0	01/31/03
IU IMINS	- IOIAL		1371		241-S TANK FAR	A CTATIC			1380		
S-101	SOUND	IS	352	0	45	0 0	67	45	235	117	04/31/04
S-102	SOUND	/R		Retrieval in p		-	•	,,	}		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				-	note (6), page 18				ŀ		
S-103	SOUND	IS (3)	237	1	45	0	24	46	9	227	06/30/04
S-104	ASMD LKR	IS (4)	288	0	49	0	0	49	132	156	12/20/84
S-105	SOUND	IS (3)	406	0	42	0	114	42	2	404	01/01/02
S-106 S-107	SOUND	IS (3)	455	0	26	0	204	26	0	455	02/28/01
S-107 S-108	SOUND SOUND	IS IS	358 550	0	42 4	0	83 200	42 4	320 5	38 545	02/04/04 01/01/02
S-108 S-109	SOUND	IS	533	0	4 16	0	200 34	16	13	520	01/01/02
S-109 S-110	SOUND	IS	389	o o	30	0	203	30	96	293	01/01/02
S-111	SOUND	IS (4)	411	.	-	0	100	-	76	335	06/30/04
S-112	SOUND	/R	-	Retrieval in p	rogress	-	-	_	-	-	
				See Foot	mote (7), page 18						
12 TANKS	- TOTAL		4403						1312	3090	

Table 4-1. Inventory and Status by Tank - Single-Shell Tanks (sheet 3 of 4).

r	11				Status by Tai					<u> </u>	 1
		All vol	ime data (obtained fr	om Tank Wast		te Volum		мпи2)	· I	
				Super-	Drainable	Pumped		Drainable			
			Total	natant	Interstitial	this	Total	Liquid		Salt-	Solids
Tank	Tank	Tank	Waste	Liquid	Liquid			Remaining	Sludge	cake	Volume
Number		Status	(Kgal)	(Kgal)	(Kgal)		(Kgal)	(Kgal)	(Kgal)	(Kgal)	Update
TTOTTO	magniy	Dutus	(IIgui)	(11641)	241-SX TANK I			(*-B)	(12841)	(8)	<u> </u>
SX-101	SOUND	IS	419	0	43	0	33	44	144	275	06/30/04
SX-102	SOUND	IS	341	0	36	0	98	36	55	286	08/31/04
SX-103	SOUND	IS	509	0	40	0	134	40	78	431	09/30/03
SX-104	ASMD LKR	IS	446	0 0	48 39	0	231 153	48 39	136 63	310 312	04/30/00 12/31/02
SX-105 SX-106	SOUND SOUND	IS IS	375 396	0	37	0	148	37	03	396	01/31/03
SX-100	ASMD LKR	IS	94	0	7	0	0	7	94	0	07/01/04
SX-108	ASMD LKR	IS	74	0	0	0	0	0	74	0	06/30/04
SX-109	ASMD LKR	IS	241	0	0	0	0	0	66	175	07/01/04
SX-110	ASMD LKR	IS	56	0	0	0	0	0	49	7	07/01/04
SX-111	ASMD LKR	IS	115	0	11 6	0	0	11 6	98 75	17 0	07/01/04 07/01/04
SX-112 SX-113	ASMD LKR ASMD LKR	IS IS	75 19	0	0	0	0	0	19	0	01/01/02
SX-113	ASMD LKR	IS	155	0	30	0	0	30	126	29	07/01/04
SX-115	ASMD LKR	IS	4	0	0	0	0	0	4	0	01/01/02
15 TANKS	- TOTAL		3319						1081	2238	
					241-T TANK F	ARM STAT	US				
T-101	ASMD LKR	IS	99	0	16	0	25	16	37	62	06/30/04
T-102	SOUND	IS	32	13	3	0	0	16	19	0	08/31/84
T-103 T-104	ASMD LKR SOUND	IS IS	27 317	4 0	3 31	0	0 150	7 31	23 317	0	11/29/83 11/30/99
T-104	SOUND	IS	98	0	5	0	0	5	98	0	05/29/87
T-106	ASMD LKR	IS	22	ő	0	Õ	ő	0	22	ő	01/01/01
T-107	ASMD LKR	IS	173	0	34	0	11	34	173	0	05/31/96
T-108	ASMD LKR	IS	16	0	4	0	0	4	5	11	01/01/01
T-109	ASMD LKR	IS	62	0	11	0	0	11	0	62	01/01/02
T-110 T-111	SOUND ASMD LKR	IS IS	370 447	1 0	48 38	0	50 10	49 38	369 447	0	03/31/02 01/01/02
T-112	SOUND	IS	67	7	4	0	0	11	60	ő	04/28/82
T-201	SOUND	IS	30	2	4	Ö	0	6	28	ŏ	07/01/04
T-202	SOUND	IS	20	0	3	0	0	3	20	0	07/01/04
T-203	SOUND	IS	36	0	5	0	0	5	36	0	07/01/04
T-204	SOUND	IS	36	0	5	0	0		36	0	07/01/04
16 TANKS	- TOTAL		1852						1690	135	
TX-101	SOUND	IS	91	1 0	241-TX TANK I	FARM STAT	rus 0	7	74	17	01/01/02
TX-101	SOUND	IS	217	0	27	0	94	27	2	215	03/31/03
TX-103	SOUND	IS	145	0	18	Õ	68	18	ō	145	01/01/02
TX-104	SOUND	IS	69	2	9	0	4	11	34	33	06/30/04
TX-105	ASMD LKR	IS	576	0	2.5	0	122	25	8	568	01/01/02
TX-106	SOUND	IS	348	0	37	0	135	37	5	343	03/31/02
TX-107	ASMD LKR	IS IS	29 127	0	7 8	0	0	7 8	0 6	29	01/31/03 06/30/04
TX-108 TX-109	SOUND SOUND	IS IS	363	0	6	0	14 72	6	363	121 0	01/01/02
TX-110	ASMD LKR	IS	467	0	14	0	115	14	37	430	01/01/02
TX-111	SOUND	IS	364	0	10	ō	98	10	43	321	06/30/04
TX-112	SOUND	IS	634	0	26	0	94	26	0	634	01/01/02
TX-113	ASMD LKR	IS	638	0	18	0	19	18	93	545	06/30/04
TX-114 TX-115	ASMD LKR ASMD LKR	IS IS	532	0	17	0	104	17	4	528	01/01/02
TX-115	ASMD LKR ASMD LKR	IS	553 599	0	25 21	0	99 24	25 21	8 66	545 533	06/30/04 04/30/03
TX-117	ASMD LKR	IS	480	0	10	0	54	10	29	451	06/30/03
TX-118	SOUND	IS	247	0	31	0	89	31	ő	247	06/30/04
18 TANKS	- TOTAL		6479						772	5705	

Table 4-1. Inventory and Status by Tank - Single-Shell Tanks (sheet 4 of 4).

	1				tatus by Tan						
		All volu	me data o	btained fro	om Tank Waste				WINS)		
				~	- 11		te Volum				
			_	Super-	Drainable	Pumped	_	Drainable		_ [
			Total	natant	Interstitial	this	Total	Liquid		Salt-	Solids
Tank	Tank	Tank	Waste	Liquid	Liquid	Month	Pumped	Remaining	Sludge	cake	Volume
Number	Integrity	Status	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	(Kgal)	Update
				2	41-TY TANK FA	ARM STATU	J S				
TY-101	ASMD LKR	IS	119	0	2	0	- 8	2	72	47	01/31/03
TY-102	SOUND	IS	69	0	13	0	7	13	0	69	01/01/02
TY-103	ASMD LKR	IS	154	0	23	0	12	23	103	51	06/30/04
TY-104	ASMD LKR	IS	44	1	4	0	0	5	43	0	03/31/02
TY-105	ASMD LKR	IS	231	0	12	0	4	12	231	0	04/28/82
TY-106	ASMD LKR	IS	16	0	1	0	0	1	16	0	01/01/02
6 TANKS	- TOTALS		633				,	•	465	167	
					241-U TANK FA	RM STATU	S				
U-101	ASMD LKR	IS	23	0	4	0	- 0	4	23	0	06/30/04
U-102	SOUND	IS	327	1	37	0	87	38	43	283	12/31/02
U-103	SOUND	I S(4)	417	1	33	0	99	34	11	405	01/01/05
U-104	ASMD LKR	IS	122	0	0	0	0	0	122	0	01/01/02
U-105	SOUND	IS	353	0	44	0	88	44	32	321	03/30/01
U-106	SOUND	IS	170	2	36	0	39	39	0	168	06/30/04
U-107	SOUND	IS	294	0	32	0	135	32	15	279	12/31/03
U-108	SOUND	IS	434	0	46	0	115	46	29	405	09/30/04
U-109	SOUND	IS(4)	401	0	47	0	78	47	35	366	04/30/02
U-110	ASMD LKR	IS	176	0	16	0	0	16	176	0	01/01/02
U-111	SOUND	IS	222	0	31	0	86	31	26	196	08/31/03
U-112	ASMD LKR	IS	45	0	4	0	0	4	45	0	02/10/84
U-201	SOUND	IS	4	1	1	0	0	2	3	0	06/30/03
U-202	SOUND	IS	4	1	0	0	0	1	3	0	06/30/03
U-203	SOUND	IS	3	1	0	0	0	1	2	0	06/30/03
U-204	SOUND	IS	3	1	0	0	0	1	2	0	06/30/03
16 TANKS	- TOTALS		2998						567	2423	

Note: +/- 1 Kgal difference in volumes is due to rounding.

Footnote:

- (1) C-106: Volumes: Total waste 2771 gallons, liquids 85 gallons, per RPP-19866, Rev. 1, "Calculation for the Post-Retrieval Waste Volume Determination for Tank 241-C-106," dated February 26, 2004.
- (2) C-202: Volumes: Total waste 490 gallons, and sludge 490 gallons, per Best-Basis Inventory.
- (3) Hanford Federal Facility Agreement and Consent Order (signed August 2004) modified Milestone M-45-00C (Change Order M-45-04-01) changed the regulatory requirements for retrieval of waste in tanks S-103, S-105, and S-106. "Retrieval" status in these tanks is thereby rescinded.
- (4) Tank A-101 contains retained gas in saltcake; tanks S-102, S-111, U-103, and U-109 contain retained gas in saltcake and sludge.
- (5) C-203: Volumes: Total waste 139 gallons, and sludge 139 gallons, per RPP-CALC-25672, Rev. 0, "Calculation for the Post-Retrieval Waste Volume Determination for Single-Shell Tank C-103," dated March 31, 2005.
- (6) S-102: Volume estimate as of March 21, 2005: Total waste 390,000 gallons.
- (7) S-112: Volume estimate as of May 17, 2005: Total waste 31,000 gallons.

Table 4-2. Single-Shell Tanks Interim Stabilization Status (Sheet 1 of 2).

	1 able 4-2.			IIII Stavii	ization Status	S(Sheet I of 2	
		Interim	Interim			Interim	Interim
Tank	Tank	Stabilization	Stabilization	Tank	Tank	Stabilization	Stabilization
Number	Integrity	Date (1)	Method	Number	Integrity	Date (1)	Method
A-101	SOUND	11/03	JET (16)	BY-107	ASMD LKR	07/79	JET
A-102	SOUND	08/89	SN	BY-108	ASMD LKR	02/85	JET
A-103	ASMD LKR	06/88	AR	BY-109	SOUND	07/97	JET
A-104	ASMD LKR	09/78	AR (3)	BY-110	SOUND	01/85	JET
A-105	ASMD LKR	07/79	AR	BY-111	SOUND	01/85	JET
A-106	SOUND	08/82	AR	BY-112	SOUND	06/84	JET
AX-101	SOUND	06/03	JET (9)	C-101	ASMD LKR	11/83	AR
AX-102	ASMD LKR	09/88	SN	C-102	SOUND	09/95	JET (2)
AX-103	SOUND	08/87	AR	C-103	SOUND	07/03	JET (11)
AX-104	ASMD LKR	08/81	AR	C-104	SOUND	09/89	SN
B-101	ASMD LKR	03/81	SN	C-105	SOUND	10/95	AR
B-102	SOUND	08/85	SN	C-106	SOUND	Retrieval Comp	
B-103	ASMD LKR	02/85	SN	C-107	SOUND	09/95	JET
B-104	SOUND	06/85	SN	C-108	SOUND	03/84	AR
B-105	ASMD LKR	12/84	AR	C-109	SOUND	11/83	AR
B-106	SOUND	03/85	SN	C-110	ASMD LKR	05/95	JET
B-107	ASMD LKR	03/85	SN	C-110	ASMD LKR	03/84	SN
B-107	SOUND	05/85	SN	C-111	SOUND	09/90	AR
B-109	SOUND	04/85	SN	C-201	ASMD LKR	03/82	AR
B-110	ASMD LKR	12/84	AR	C-201	ASMD LKR	08/81	AR
B-111	ASMD LKR	06/85	SN	C-202	ASMD LKR ASMD LKR	Retrieval Comp	
B-112	ASMD LKR	05/85	SN	C-203	ASMD LKR	09/82	AR
B-112 B-201	ASMD LKR	03/83	AR (3)	S-101	SOUND	12/03	JET (18)
B-202	SOUND	05/85	AR (3) AR (2)	S-101	SOUND		
B-202 B-203	ASMD LKR	05/83	AR (2)	S-102 S-103		Retrieval i	
B-203	ASMD LKR	06/84	AR	S-103	SOUND	04/00 12/84	JET
B-204 BX-101	ASMD LKR ASMD LKR	09/78			ASMD LKR		AR
			AR (3)	S-105	SOUND	09/88	JET
BX-102	ASMD LKR	11/78	AR (2) (2)	S-106	SOUND	02/01	JET (12)
BX-103	SOUND	11/83	AR (2) (3)	S-107	SOUND	08/03	JET (13)
BX-104	SOUND	09/89	SN	S-108	SOUND	12/96	JET
BX-105	SOUND	03/81	SN	S-109	SOUND	06/01	JET
BX-106	SOUND	07/95	SN	S-110	SOUND	01/97	JET
BX-107	SOUND	09/90	JET	S-111	SOUND	12/03	Jet (17)
BX-108	ASMD LKR	07/79	SN	S-112	SOUND	Retrieval i	
BX-109	SOUND	08/90	JET	SX-101	SOUND	08/03	JET (12)
BX-110	ASMD LKR	08/85	SN	SX-102	SOUND	08/03	JET (14)
BX-111	ASMD LKR	03/95	JET	SX-103	SOUND	05/03	JET (8)
BX-112	SOUND	09/90	JET	SX-104	ASMD LKR	04/00	JET
BY-101	SOUND	05/84	JET	SX-105	SOUND	08/02	JET (6)
BY-102	SOUND	04/95	JET	SX-106	SOUND	05/00	JET
BY-103	ASMD LKR	11/97	JET (2)	SX-107	ASMD LKR	10/79	AR
BY-104	SOUND	01/85	JET	SX-108	ASMD LKR	08/79	AR
BY-105	ASMD LKR	03/03	JET	SX-109	ASMD LKR	05/81	AR
BY-106	ASMD LKR	12/03	JET (19)	SX-110	ASMD LKR	08/79	AR

Table 4-2. Single-Shell Tanks Interim Stabilization Status (Sheet 2 of 2).

Tank	Table 4-2. Single-Shell Tanks Interim Stabilization Status (Sheet 2 of 2).							<u>.). </u>
Number Integrity Date (1) Method Number Integrity Date (1) Method SX-111 ASMD LKR 07/79 SN TX-111 SOUND 04/83 JET SX-112 ASMD LKR 07/79 AR TX-112 SOUND 04/83 JET SX-113 ASMD LKR 11/78 AR TX-114 ASMD LKR 04/83 JET SX-114 ASMD LKR 07/79 AR TX-114 ASMD LKR 04/83 JET SX-115 ASMD LKR 09/78 AR (3) TX-115 ASMD LKR 09/83 JET T-101 ASMD LKR 04/93 SN TX-116 ASMD LKR 09/83 JET T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-104 SOUND 11/99 JET TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 <t< td=""><td></td><td></td><td></td><td>Interim</td><td></td><td></td><td>Interim</td><td></td></t<>				Interim			Interim	
SX-111 ASMD LKR 07/79 SN TX-111 SOUND 04/83 JET SX-112 ASMD LKR 07/79 AR TX-112 SOUND 04/83 JET SX-113 ASMD LKR 01/79 AR TX-113 ASMD LKR 04/83 JET SX-114 ASMD LKR 09/79 AR TX-114 ASMD LKR 04/83 JET SX-115 ASMD LKR 09/78 AR (3) TX-115 ASMD LKR 04/83 JET T-101 ASMD LKR 04/93 SN TX-116 ASMD LKR 04/83 JET T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-103 ASMD LKR 11/83 AR TX-118 SOUND 04/83 JET T-104 SOUND 06/87 AR TX-102 SOUND 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR	Tank	Tank	Stabilization	Stabilization	Tank	Tank	Stabilization	Stabilization
SX-112 ASMD LKR 07/79 AR TX-112 SOUND 04/83 JET SX-113 ASMD LKR 11/78 AR TX-113 ASMD LKR 04/83 JET SX-114 ASMD LKR 07/79 AR TX-114 ASMD LKR 09/83 JET TX-115 ASMD LKR 09/78 AR (3) TX-115 ASMD LKR 09/83 JET T-101 ASMD LKR 04/93 SN TX-116 ASMD LKR 04/83 JET T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-103 ASMD LKR 11/83 AR TX-118 SOUND 04/83 JET T-104 SOUND 06/87 AR TY-101 ASMD LKR 03/83 JET T-104 SOUND 06/87 AR TY-104 ASMD LKR 09/79 AR T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET <								
SX-113 ASMD LKR 11/78 AR TX-113 ASMD LKR 04/83 JET SX-114 ASMD LKR 07/79 AR TX-114 ASMD LKR 04/83 JET SX-115 ASMD LKR 09/78 AR (3) TX-115 ASMD LKR 09/83 JET T-101 ASMD LKR 04/93 SN TX-116 ASMD LKR 04/83 JET T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-103 ASMD LKR 11/83 AR TX-118 SOUND 04/83 JET T-104 SOUND 11/99 JET TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-105 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET		ASMD LKR		SN				
SX-114 ASMD LKR 07/79 AR TX-114 ASMD LKR 04/83 JET SX-115 ASMD LKR 09/78 AR (3) TX-115 ASMD LKR 09/83 JET T-101 ASMD LKR 04/93 SN TX-116 ASMD LKR 04/83 JET T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-102 SOUND 03/81 AR (2)(3) TX-118 SOUND 04/83 JET T-104 SOUND 11/99 JET TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-103 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-105 ASMD LKR 02/83 JET		ASMD LKR						JET
SX-115 ASMD LKR 09/78 AR (3) TX-115 ASMD LKR 09/83 JET T-101 ASMD LKR 04/93 SN TX-116 ASMD LKR 04/83 JET T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-103 ASMD LKR 11/83 AR TX-118 SOUND 04/83 JET T-104 SOUND 06/87 AR TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-104 ASND KJR 11/83 AR T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-105 ASMD LKR 02/83 JET	SX-113	ASMD LKR	11/78	AR	TX-113	ASMD LKR	04/83	JET
T-101 ASMD LKR 04/93 SN TX-116 ASMD LKR 04/83 JET T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-103 ASMD LKR 11/83 AR TX-118 SOUND 04/83 JET T-104 SOUND 11/99 JET TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-102 SOUND LKR 02/83 JET T-108 ASMD LKR 05/96 AR TY-104 ASMD LKR 02/83 JET T-109 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 02/83 JET <	SX-114	ASMD LKR	07/79	AR	TX-114	ASMD LKR	04/83	JET
T-102 SOUND 03/81 AR (2)(3) TX-117 ASMD LKR 03/83 JET T-103 ASMD LKR 11/83 AR TX-118 SOUND 04/83 JET T-104 SOUND 11/99 JET TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET T-106 ASMD LKR 05/96 AR TY-104 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-104 ASMD LKR 02/83 JET T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 02/83 JET T-110 SOUND 01/00 JET U-101 ASMD LKR 09/79 AR <t< td=""><td>SX-115</td><td>ASMD LKR</td><td>09/78</td><td>AR (3)</td><td>TX-115</td><td>ASMD LKR</td><td>09/83</td><td>JET</td></t<>	SX-115	ASMD LKR	09/78	AR (3)	TX-115	ASMD LKR	09/83	JET
T-103 ASMD LKR 11/83 AR TX-118 SOUND 04/83 JET T-104 SOUND 11/99 JET TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-104 ASND KJR 11/83 AR T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 11/78 AR TY-106 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 02/83 JET T-110 SOUND 01/00 JET U-101 ASMD LKR 09/83 JET T-110 SOUND 03/81 AR (2)(3) U-102 SOUND 06/02 JET (5) <t< td=""><td>T-101</td><td>ASMD LKR</td><td>04/93</td><td>SN</td><td>TX-116</td><td>ASMD LKR</td><td>04/83</td><td>JET</td></t<>	T-101	ASMD LKR	04/93	SN	TX-116	ASMD LKR	04/83	JET
T-104 SOUND 11/99 JET TY-101 ASMD LKR 04/83 JET T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-104 ASND KJR 11/83 AR T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 11/78 AR TY-106 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 11/78 AR T-110 SOUND 01/00 JET U-101 ASMD LKR 11/78 AR T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET	T-102	SOUND	03/81	AR (2)(3)	TX-117	ASMD LKR	03/83	JET
T-105 SOUND 06/87 AR TY-102 SOUND 09/79 AR T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-104 ASMD LKR 11/83 AR T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 01/78 AR T-10 SOUND 01/00 JET U-101 ASMD LKR 09/79 AR T-110 SOUND 01/00 JET U-102 SOUND 06/02 JET (5) T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (2)(3) U-104 ASMD LKR 10/78 AR <tr< td=""><td>T-103</td><td>ASMD LKR</td><td>11/83</td><td>AR</td><td></td><td>SOUND</td><td>04/83</td><td>JET</td></tr<>	T-103	ASMD LKR	11/83	AR		SOUND	04/83	JET
T-106 ASMD LKR 08/81 AR TY-103 ASMD LKR 02/83 JET T-107 ASMD LKR 05/96 AR TY-104 ASND KJR 11/83 AR T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 11/78 AR T-110 SOUND 01/00 JET U-101 ASMD LKR 09/79 AR T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (3) U-103 SOUND 09/00 JET T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET	T-104	SOUND	11/99	JET	TY-101	ASMD LKR	04/83	JET
T-107 ASMD LKR 05/96 AR TY-104 ASND KJR 11/83 AR T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 11/78 AR T-110 SOUND 01/00 JET U-101 ASMD LKR 09/79 AR T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (3) U-104 ASMD LKR 10/78 AR T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 03/04 (20) <td< td=""><td>T-105</td><td>SOUND</td><td>06/87</td><td>AR</td><td>TY-102</td><td>SOUND</td><td>09/79</td><td>AR</td></td<>	T-105	SOUND	06/87	AR	TY-102	SOUND	09/79	AR
T-108 ASMD LKR 11/78 AR TY-105 ASMD LKR 02/83 JET T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 11/78 AR T-110 SOUND 01/00 JET U-101 ASMD LKR 09/79 AR T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (3) U-104 ASMD LKR 10/78 AR T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 03/01 JET (15) TX-101 SOUND 08/83 JET U-108 SOUND 03/04 (20) <t< td=""><td>T-106</td><td>ASMD LKR</td><td>08/81</td><td>AR</td><td>TY-103</td><td>ASMD LKR</td><td>02/83</td><td>JET</td></t<>	T-106	ASMD LKR	08/81	AR	TY-103	ASMD LKR	02/83	JET
T-109 ASMD LKR 12/84 AR TY-106 ASMD LKR 11/78 AR T-110 SOUND 01/00 JET U-101 ASMD LKR 09/79 AR T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (3) U-104 ASMD LKR 10/78 AR T-202 SOUND 04/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 03/01 JET (15) TX-101 SOUND 08/81 AR U-107 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-108 SOUND 03/04 (20) TX-	T-107	ASMD LKR	05/96	AR	TY-104	ASND KJR	11/83	AR
T-110 SOUND 01/00 JET U-101 ASMD LKR 09/79 AR T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (3) U-104 ASMD LKR 10/78 AR T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 04/81 AR U-106 SOUND 03/01 JET TX-101 SOUND 08/81 AR U-107 SOUND 03/04 (20) TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 <td></td> <td>ASMD LKR</td> <td>11/78</td> <td>AR</td> <td></td> <td>ASMD LKR</td> <td>02/83</td> <td>JET</td>		ASMD LKR	11/78	AR		ASMD LKR	02/83	JET
T-111 ASMD LKR 02/95 JET U-102 SOUND 06/02 JET (5) T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (3) U-104 ASMD LKR 10/78 AR T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 10/03 JET (15) TX-101 SOUND 08/81 AR U-107 SOUND 03/04 (20) TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-	T-109	ASMD LKR	12/84	AR	TY-106	ASMD LKR	11/78	AR
T-112 SOUND 03/81 AR (2)(3) U-103 SOUND 09/00 JET T-201 SOUND 04/81 AR (3) U-104 ASMD LKR 10/78 AR T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 10/03 JET (15) TX-101 SOUND 08/81 AR U-107 SOUND 10/03 JET (15) TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) T		SOUND	01/00	JET	U-101	ASMD LKR	09/79	AR
T-201 SOUND 04/81 AR (3) U-104 ASMD LKR 10/78 AR T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 10/03 JET (15) TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 SN TX-108	T-111	ASMD LKR	02/95	JET	U-102	SOUND	06/02	JET (5)
T-202 SOUND 08/81 AR U-105 SOUND 03/01 JET T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 10/03 JET (15) TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 <td>T-112</td> <td>SOUND</td> <td>03/81</td> <td>AR (2)(3)</td> <td>U-103</td> <td>SOUND</td> <td>09/00</td> <td>JET</td>	T-112	SOUND	03/81	AR (2)(3)	U-103	SOUND	09/00	JET
T-203 SOUND 04/81 AR U-106 SOUND 03/01 JET T-204 SOUND 08/81 AR U-107 SOUND 10/03 JET (15) TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 </td <td>T-201</td> <td>SOUND</td> <td>04/81</td> <td>AR (3)</td> <td>U-104</td> <td>ASMD LKR</td> <td>10/78</td> <td>AR</td>	T-201	SOUND	04/81	AR (3)	U-104	ASMD LKR	10/78	AR
T-204 SOUND 08/81 AR U-107 SOUND 10/03 JET (15) TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 SN TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	T-202	SOUND	08/81	AR	U-105	SOUND	03/01	JET
TX-101 SOUND 02/84 AR U-108 SOUND 03/04 (20) TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	T-203	SOUND	04/81	AR	U-106	SOUND	03/01	JET
TX-102 SOUND 04/83 JET U-109 SOUND 04/02 JET (4) TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	T-204	SOUND	08/81	AR	U-107	SOUND	10/03	JET (15)
TX-103 SOUND 08/83 JET U-110 ASMD LKR 12/84 AR TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	TX-101	SOUND	02/84	. AR	U-108	SOUND	03/04	(20)
TX-104 SOUND 09/79 SN U-111 SOUND 06/03 JET (10) TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	TX-102	SOUND	04/83	JET	U-109	SOUND	04/02	JET (4)
TX-105 ASMD LKR 04/83 JET U-112 ASMD LKR 09/79 AR TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	TX-103	SOUND	08/83	JET	U-110	ASMD LKR	12/84	AR
TX-106 SOUND 06/83 JET U-201 SOUND 08/79 AR TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	TX-104	SOUND	09/79	SN	U-111	SOUND	06/03	JET (10)
TX-107 ASMD LKR 10/79 AR U-202 SOUND 08/79 SN TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	TX-105	ASMD LKR	04/83	JET	U-112	ASMD LKR	09/79	AR
TX-108 SOUND 03/83 JET U-203 SOUND 08/79 AR TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	TX-106	SOUND	06/83	JET	U-201	SOUND	08/79	AR
TX-109 SOUND 04/83 JET U-204 SOUND 08/79 SN	TX-107	ASMD LKR	10/79	AR	U-202	SOUND	08/79	SN
	TX-108	SOUND	03/83	JET	U-203	SOUND	08/79	AR
TX-110 ASMD LKR 04/83 JET	TX-109	SOUND	04/83	JET	U-204	SOUND	08/79	SN
	TX-110	ASMD LKR	04/83	JET				

LEGEND:			
AR	Administratively Interim Stabilized	Interim Stabilized Tanks	149
JET	Saltwell Jet Pumped to Remove Drainable Interstitial Liquid	Total Single-Shell Tanks	149
SN	Supernatant Pumped (Non-Jet Pumped)	_	
ASMD LKR	Assumed Leaker	·	
N/A	Not yet Interim Stabilized		

Table 4-2. - Footnotes: (in chronological order)

- (1) These dates indicate when the tanks were actually interim stabilized. In some cases, the official interim stabilization documents were issued at a later date.
- Although tanks 241-BX-103, T-102, and T-112 met the interim stabilization administrative procedure at the time they were stabilized, they no longer meet the updated administrative procedure. The tanks were re-evaluated in 1996 and a letter was issued to DOE-RL recommending that no further pumping be performed on these tanks, based on an economic evaluation. In February 2000, it was determined that five tanks no longer met the stabilization criteria (241-

Table 4-2. - Footnotes continued

BX-103, T-102, and T-112 exceed the supernatant criteria, and BY-103 and C-102 exceed the Drainable Interstitial Liquid [DIL]criteria).

An intrusion investigation was completed on tank 241-B-202 in 1996 and it was determined that this tank no longer meets the recently updated administrative procedure for 200 series tanks.

- Original interim stabilization data are missing on four tanks: 241-B-201, T-102, T-112, and T-201. In February 2001, three additional tanks were added to those missing stabilization data: 241-A-104, BX-101, and SX-115.
- Tank 241-U-109 was declared Interim Stabilized on April 5, 2002. The declaration letter to DOE was issued on June 20, 2002. The surface is primarily a brown colored waste with irregular patches of white salt crystal. Approximately 70% of the waste surface is covered by the salt formations. The waste surface appears dry and shows signs of cracking due to saltwell pumping. There is no visible liquid within the tank.
- Tank 241-U-102 was declared Interim Stabilized on June 19, 2002. The declaration letter to DOE was issued June 28, 2002. The surface is primarily a gray-brown colored cracked waste with irregular patches of white salt crystal. Approximately 50% of the waste surface is covered by the salt formations. The waste surface appears dry and shows signs of cracking due to saltwell pumping. There is approximately a 5-foot wide pool of visible liquid within the saltwell screen depression.
- (6) Tank 241-SX-105 was declared Interim Stabilized on August 1, 2002; the declaration letter to DOE was issued August 20, 2002. The surface is a rough, yellowish-gray saltcake waste with an irregular surface of visible cracks and shelves due to saltwell pumping. The waste surface appears to be dry and shows no standing water within the tank.
- Tank 241-BY-105 was declared Interim Stabilized on March 7, 2003; the declaration letter to DOE was issued March 25, 2003. An in-tank video was taken January 5, 2003. The surface is a rough, yellowish brown saltcake waste with an irregular surface of visible lumps and shelves that were created as the surface was dried out by saltwell pumping. The waste surface appears to be dry and shows no standing water within the tank. A large hole around the saltwell screen shows no evidence of supernatant liquid.
- (8) Tank 241-SX-103 was declared Interim Stabilized on May 31, 2003; the declaration letter to DOE was issued June 13, 2003. An in-tank video was taken December 31, 2001. The upper waste surface is uneven and rough, with many cracks and shelves due to surface drying caused by saltwell pumping. All estimations regarding waste dimensions were obtained by comparison with known dimensions of installed in-tank equipment.
- (9) Tank 241-AX-101 was declared Interim Stabilized on June 2, 2003. The declaration letter to DOE was issued January 19, 2004. An in-tank video was taken November 5, 2003. The surface is a dry flaky, crystalline, yellowish-white saltcake waste in a fairly uniform surface of large cracks that were created as the surface dried out by saltwell pumping. The surface is dry and shows no standing water in the tank.
- Tank 241-U-111 was declared Interim Stabilized on June 25, 2003, due to major equipment failure; the declaration letter to DOE was issued July 14, 2003. An in-tank video was taken March 25, 2003. The surface is a dry, crusty, flat surface saltcake waste with a fairly uniform surface of large cracks and pocked holes that were created as the surface was dried out by saltwell pumping. The waste surface is dry and shows no standing water.
- Tank 241-C-103 was declared Interim Stabilized on July 11, 2003, due to major equipment failure; the declaration letter to DOE was issued August 13, 2003. An in-tank video was taken March 3, 2003. The surface is a dry-cracked brown sludge type waste, which appears to be relatively level and to have more cracking near the tank walls. There is a roughly 3-foot diameter supernatant pool around the saltwell screen. There are also small supernatant pools around two risers and many liquid pockets across the center waste surface. The ENRAF is out of service and there is no liquid observation well (LOW) installed in the tank.
- Tank 241-SX-101 was declared Interim Stabilized on August 14, 2003; the declaration letter to DOE was issued August 22, 2003. An in-tank video was taken August 6, 2003. The surface is a rough, yellowish gray saltcake waste with an irregular surface of visible cracks and shelves that were created as the waste was dried out by saltwell pumping. The waste surface appears to be dry and shows no standing water. A cylindrical pool (approximately 5 foot diameter) around the saltwell screen shows evidence of apparent supernatant liquid, but upon closer examination, was determined to be interstitial liquid.

Table 4-2. - Footnotes continued

- Tank 241-S-107 was declared Interim Stabilized on August 28, 2003, due to major equipment failure. Interim Stabilization documentation was issued February 4, 2004; the declaration letter to DOE was issued February 26, 2004. An in-tank video was taken December 12, 2003. The waste appears as a flat, dark, sludge-type waste with an irregular surface of visible cracks created as the waste dried out from saltwell pumping. The waste surface appears to be dry except for a small pool surrounding the saltwell screen.
- Tank 241-SX-102 was declared Interim Stabilized on August 28, 2003, due to major equipment failure. The declaration letter to DOE was issued August 4, 2004. An in-tank video was taken December 10, 2003. The waste is a rough, yellowish-tray saltcake with an irregular surface of visible cracks and shelves that were created as the waste was dried out by saltwell pumping. The waste surface appears to be dry and shows no standing water on the surface.
- (15) Tank 241-U-107 was declared Interim Stabilized on October 7, 2003. The declaration letter to DOE was issued January 19, 2004. An in-tank video was taken February 4, 2003. The surface is a smooth, brownish saltcake with irregular patches of white salt crystals created as the waste was dried out from saltwell pumping. The waste surface appears to be dry and shows no standing water on the surface.
- Tank 241-A-101 was declared Interim Stabilized on November 10, 2003. The declaration letter to DOE was issued June 30, 2004. An in-tank video was taken September 5, 2003. The waste appears as a flat, dark, sludge-type waste with an irregular surface with white clumps of a saltcake-type material. Cracks in the waste surface were created as the waste was dried out by saltwell pumping. The waste surface is dry except for a small pool around the saltwell screen.
- (17) Tank 241-S-111 was declared Interim Stabilized on December 15, 2003, due to major equipment failure. The declaration letter to DOE was issued May 26, 2005.
- Tank 241-S-101 was declared Interim Stabilized on December 29, 2003. The declaration letter to DOE was issued April 30, 2004. An in-tank video was taken March 2, 2004. The waste appears to be a flat, dark, sludge-type waste with an irregular surface with white clumps of saltcake. Also visible are cracks in the waste surface that were created as the waste was dried out by saltwell pumping. The waste surface is dry except for this small pool.
- (19) Tank BY-106 was declared Interim Stabilized on December 31, 2003. This tank is in evaluation to confirm interim stabilization criteria have been met.
- (20) Tank U-108 was declared Interim Stabilized on March 18, 2004, due to major equipment failure. The declaration letter to DOE was issued September 8, 2004. An in-tank video was taken March 8, 2004. The waste is a smooth, brownish saltcake waste with irregular patches of white salt crystals that were created as the waste was dried out by saltwell pumping. The surface appears to be dry with evidence of cracking and no standing water.

Table 4-3. Single-Shell Tank Leak Volume Estimates (Sheet 1 of 2)

1 4010	I-3. Single-Shell Tank	Estimated Leak			Estimate
	Confirmed or	Volume	Interim	Leak	Stillate
Tank Number	Assumed Leaker (3)	Gallons (2)	Stabilized (11)	Updated	Reference
241-A-103	1987	5500 (8)	06/88	1987	(j)
241-A-104	1975	500 to 2500	09/78	1983	(a)(p)
241-A-105 (1)	1963	10000 to 270000	07/79	1991	(b)(c)
241-AX-102	1988	3000 (8)	09/88	1989	(h)
241-AX-104	1977	(6)	08/81	1989	(n) (g)
241-B-101	1974	(6)	03/81	1989	(g)
241-B-103	1978	(6)	02/85	1989	(g)
241-B-105	1978	(6)	12/84	1989	(g)
241-B-107	1980	8000 (8)	03/85	1986	(d)(f)
241-B-110	1981	10000 (8)	03/85	1986	(d)
241-B-111	1978	(6)	06/85	1989	(g)
241-B-112	1978	2000	05/85	1989	(g)
241-B-201	1980	1200 (8)	08/81	1984	(e)(f)
241-B-203	1983	300 (8)	06/84	1986	(d)
241-B-204	1984	400 (8)	06/84	1989	
241-BX-101	1972	(6)	09/78	1989	(g)
241-BX-101	1971	70000	11/78	1989	(g) (d)
241-BX-102 241-BX-108	1974	2500	07/79	1986	
241-BX-110	1976	(6)	08/85	1989	(d)
241-BX-110	1984 (13)	(6)	03/95	1989	(g)
241-BY-103	1964 (13)		11/97		(g)
241-BY-105	1973	<5000		1983	(a)
241-BY-106	1984	(6)	03/03	1989	(g)
241-BY-107	1984	(6)	N/A	1989	(g)
241-BY-108	1972	15100 (8) <5000	07/79	1989	(g)
241-C-101	1980		02/85	1983	(a)
241-C-101 241-C-110	1984	20000 (8)(10)	11/83 05/95	1986	(d)
241-C-111	1968	- · · · · · · · · · · · · · · · · · · ·		1989	(g)
241-C-111 241-C-201 (4)	1988	5500 (8)	03/84 03/82	1989	(g)
241-C-201 (4)	1988	550		1987	(i)
241-C-203	1984	450	08/81	1987	(i)
241-C-204 (4)	1988	400 (8) 350	03/82	1986	(d)
241-S-104	1968	24000 (8)	09/82 12/84	1987 1989	(i)
241-SX-104				<u> </u>	(g)
241-SX-104 241-SX-107	1988	6000 (8)	04/00	1988	(k)
241-SX-107 241-SX-108 (5)(14)	1964 1962	<5000	10/79	1983	(a)
241-SX-108 (3)(14) 241-SX-109 (5)(14)	1965	2400 to 35000	08/79	1991	(l)(p)(s)
241-SX-109 (3)(14)	1976	<10000	05/81	1992	(m)(s)
241-SX-111 (14)	1974	5500 (8)	08/79	1989	(g)
241-SX-111 (14) 241-SX-112 (14)	1969	500 to 2000 30000	07/79	1986	(d)(s)
241-SX-112 (14)	1962		07/79	1986	(d)(s)
241-SX-113	1962	15000	11/78 07/79	1986	(d)
241-SX-114 241-SX-115	1965	(6) 50000		1989	(g)
241-T-101	1992	50000	09/78	1992	(n)
241-T-101	1974	7500 (8)	04/93	1992	(0)
241-T-105	1974	<1000 (8)	11/83	1989	(g)
∠ -1 1-1-100	19/3	115000 (8)	08/81	1986	(d)

Table 4-3. Single-Shell Tank Leak Volume Estimates (Sheet 2 of 2)

		Leak Estimate			
	Confirmed or Volume		Interim		
Tank Number	Assumed Leaker (3)	Gallons (2)	Stabilized (11)	Updated	Reference
241-T-107	1984	(6)	05/96	1989	(g)
241-T-108	1974	<1000 (8)	11/78	1980	(f)
241-T-109	1974	<1000 (8)	12/84	1989	(g)
241-T-111	1979, 1994 (12)	<1000 (8)	02/95	1994	(f)(r)
241-TX-105	1977	(6)	04/83	1989	(g)
241-TX-107 (5)	1984	2500	10/79	1986	(d)
241-TX-110	1977	(6)	04/83	1989	(g)
241-TX-113	1974	(6)	04/83	1989	(g)
241-TX-114	1974	(6)	04/83	1989	(g)
241-TX-115	1977	(6)	09/83	1989	(g)
241-TX-116	1977	(6)	04/83	1989	(g)
241-TX-117	1977	(6)	03/83	1989	(g)
241-TY-101	1973	<1000 (8)	04/83	1980	(f)
241-TY-103	1973	3000	02/83	1986	(d)
241-TY-104	1981	1400 (8)	11/83	1986	(d)
241-TY-105	1960	35000	02/83	1986	(d)
241-TY-106	1959	20000	11/78	1986	(d)
241-U-101	1959	30000	09/79	1986	(d)
241-U-104	1961	55000	10/78	1986	(d)
241-U-110	1975	5000 to 8100 (8)	12/84	1986	(d)(p)
241-U-112	1980	8500 (8)	09/79	1986	(d)
67 Tanks					

Table 4-3. - Footnotes:

- Current estimates [see Reference (b)] are that 610 Kgallons of cooling water was added to tank A-105 from November 1970 to December 1978 to aid in evaporative cooling. In accordance with <u>Dangerous Waste Regulations</u> [Washington Administrative Code 173-303-070 (2)(a)(ii), as amended, Washington State Department of Ecology, 1990, Olympia, Washington], any of this cooling water that has been added and subsequently leaked from the tank must be classified as a waste and should be included in the total leak volume. In August 1991, the leak volume estimate for this tank was updated in accordance with the WAC regulations. Previous estimates excluded the cooling water leaks from the total leak volume estimates because the waste content (concentration) in the cooling water which leaked should be much less than the original liquid waste in the tank (the sludge is relatively insoluble). The total leak volume estimate in this report (10 to 277 Kgallons) is based on the following (see References):
 - a. Reference (b) contains an estimate of 5 to 15 Kgallons for the initial leak prior to August 1968.
 - Reference (b) contains an estimate of 5 to 30 Kgallons for the leak while the tank was being sluiced from August 1968 to November 1970.
 - Reference (b) contains an estimate of 610 Kgallons of cooling water added to the tank from November 1970 to December 1978, but it was estimated that the leakage was small during this period. This reference contains the statement "Sufficient heat was generated in the tank to evaporate most, and perhaps nearly all, of this water." This results in a low estimate of zero gallons leakage from November 1970 to December 1978.
 - b. Reference (c) contains an estimate that 378 to 410 Kgallons evaporated out of the tank from November 1970 to December 1978. Subtracting the minimum evaporation estimate from the cooling water added estimate provides a range from 0 to 232 Kgallons of cooling water leakage from November 1970 to December 1978.

Table 4-3. - Footnotes continued

	Low Estimate	High Estimate
Prior to August 1968	5,000	15,000
August 1968 to November 1970	5,000	30,000
November 1970 to December 1978	0	<u>232,000</u>
Totals	10,000	277.000

- Tank leak volume estimates presented here are being updated as a result of additional vadose zone data, tank leak volume assessments and review of tanks for retrieval/closure consideration. Future revisions of the tank summary report will include updated leak volume and radionuclide inventory estimates by farm and will include near surface and vadose contamination from sources in addition to tank leaks that will be used for tank closure planning and performance assessments. Tank leak volume estimates presented here do not include (with some exceptions), such things as: (a) cooling/raw water leaks, (b) intrusions (rain infiltration) and subsequent leaks, (c) leaks inside the tank farm but not through the tank liner (surface leaks, pipeline leaks, leaks at the joint for the overflow or fill lines, etc.), and (d) leaks from catch tanks, diversion boxes, encasements, etc.
- In many cases, a leak was suspected long before it was identified or confirmed. For example, Reference (d) shows that tank U-104 was suspected of leaking in 1956. The leak was confirmed in 1961. This report lists the "assumed leaker" date of 1961. Using present standards, tank U-104 would have been declared an assumed leaker in 1956. In 1984, the criteria designations of "suspected leaker," "questionable integrity," "confirmed leaker," "declared leaker," and "borderline and dormant" were merged into one category now reported as "assumed leaker." See Reference (f) for explanation of when, how long, and how fast some of the tanks leaked. It is highly likely that there have been undetected leaks from single-shell tanks because of the nature of their design and instrumentation.
- (4) The leak volume estimate date for these tanks is before the declared leaker date because the tank was in a suspected leaker or questionable integrity status; however, a leak volume had been estimated prior to the tank being reclassified.
- The increasing radiation levels in drywells and laterals associated with these three tanks could be indicating continuing leak or movement of existing radionuclides in the soil. There is no conclusive way to confirm these observations.

 (Repeat spectral drywell scans are not part of the current Tank Farm leak detection program but can be run on request a special needs arise. A select subset of drywells is routinely monitored by the Vadose Zone Characterization Project to assess movement of gamma-emitting radionuclides in the subsurface. There are currently no functioning laterals and no plan to prepare them for use).
- (6) Methods were used to estimate the leak volumes from these 19 tanks based on the <u>assumption</u> that their cumulative leakage is approximately the same as for 18 of the 24 tanks identified in footnote (9). For more details see Reference (g). The total leak volume estimate for these tanks is 150 Kgallons (rounded to the nearest Kgallon), for an average of approximately 8 Kgallons for each of 19 tanks.
- (7) The total has been rounded to the nearest 50 Kgallons. Upper bound values were used in many cases in developing these estimates. It is likely that some of these tanks have not actually leaked.
- (8) Leak volume estimate is based solely on observed liquid level decreases in these tanks. This is considered to be the most accurate method for estimating leak volumes.
- (9) The curie content shown is as listed in the reference document and is <u>not</u> decayed to a consistent date: therefore, a cumulative total is inappropriate.
- Tank C-101 experienced a liquid level decrease in the late 1960s and was taken out of service and pumped to a minimum heel in December 1969. In 1970, the tank was classified as a "questionable integrity" tank. Liquid level data show decreases in level throughout the 1970s and the tank was saltwell pumped during the 1970s, ending in April 1979. The tank was reclassified as a "confirmed leaker" in January 1980. See References (p) and (q); refer to Reference (q) for information on the potential for there to have been leaks from other C-farm tanks (specifically, C-102, C-103, and C-109).
- (11) These dates indicate when the tanks were declared to be interim stabilized. In some cases, the official interim stabilization documents were issued at a later date. Also, in some cases, the field work associated with interim stabilization was completed at an earlier date.

Table 4-3. Footnotes continued

- (12) Tank T-111 was declared an "assumed re-leaker" on February 28, 1994, due to a decreasing trend in surface level measurement. This tank was pumped, and interim stabilization completed on February 22, 1995.
- (13) Tank BX-111 was declared an "assumed re-leaker" in April 1993. Preparations for pumping were delayed, following an administrative hold placed on all tank farm operations in August 1993. Pumping resumed and the tank was declared interim stabilized on March 15, 1995.
- The leak volume and curie release estimates on tanks SX-108, SX-109, SX-111, and SX-112 have been re-evaluated using a Historical Leak Model [see Reference (s)]. In general, the model estimates are much higher than the values listed in the table, both for volume and curies released. The values listed in the table do not reflect this revised estimate because, "In particular, it is worth emphasizing that this report was never meant to be a definitive update for the leak baseline at the Hanford Site. It was rather meant to be an attempt to view the issue of leak inventories with a new and different methodology." (This quote is from the first page of the referenced report).
- (15) Tri-Party Agreement milestones (M-45 series) were developed that establish a formalized approach for evaluating impacts on groundwater quality of loss of tank wastes to the vadose zone underlying these tank farms.

SST Vadose Zone Project drilling and testing activities near tank BX-102 were completed in March 2001. A borehole (299-E33-45) was drilled through the postulated uranium plume resulting from the 1951 tank BX-102 overfill event to confirm the presence of uranium, define its present depth, and survey other contaminants of interest such as Tc-99. Samples were collected for laboratory analyses.

Borehole W33-46, adjacent to tank B-110, was drilled to a depth of approximately 190 feet in July 2001. Soil samples were collected for analysis as part of the tank farm vadose zone characterization activities.

On July 31, 2002, the Washington State Department of Ecology issued a letter-directive which suggested a path forward in dealing with the high ⁹⁹Tc activity in groundwater at well 299-W23-19 near tank SX-115. No formal remediation is required, however, extensive purging of the well is to be done concurrent with quarterly sampling. In addition, an array of specific conductivity probes is to be placed in the well to monitor the electrical properties of the water (⁹⁹Tc activity is directly proportional to electrical conductivity). A data logger with remote reading capability together with the specific conductivity probes was installed and fully operational on March 11, 2003.

Table 4-3. - References:

- (a) Murthy, K. S., et al., June 1983, Assessment of Single-Shell Tank Residual Liquid Issues at Hanford Site, Washington, PNL-4688, Pacific Northwest Laboratory, Richland, Washington.
- (b) WHC, 1991a, *Tank 241-A-105 Leak Assessment*, WHC-MR-0264, Westinghouse Hanford Company, Richland, Washington.
- (c) WHC, 1991b, Tank 241-A-105 Evaporation Estimate 1970 Through 1978, WHC-EP-0410, Westinghouse Hanford Company, Richland, Washington.
- (d) Smith, D. A., January 1986, Single-Shell Tank Isolation Safety Analysis Report, SD-WM-SAR-006, Rev. 1, Rockwell Hanford Operations, Richland, Washington.
- (e) McCann, D. C., and T. S. Vail, September 1984, Waste Status Summary, RHO-RE-SR-14, Rockwell Hanford Operations, Richland, Washington.
- (f) Catlin, R. J., March 1980, Assessment of the Surveillance Program of the High-Level Waste Storage Tanks at Hanford, Office of Environmental Compliance and Review, for the U.S. Department of Energy, Washington D.C.
- (g) Baumhardt, R. J., May 15, 1989, Letter to R. E. Gerton, U.S. Department of Energy-Richland Operations Office, Single-Shell Tank Leak Volumes, 8901832B R1, Westinghouse Hanford Company, Richland, Washington.
- (h) WHC, 1990a, Occurrence Report, Surface Level Measurement Decrease in Single-Shell Tank 241-AX-102, WHC-UO-89-023-TF-05, Westinghouse Hanford Company, Richland, Washington.
- (i) Groth, D. R., July 1, 1987, Internal Memorandum to R. J. Baumhardt, *Liquid Level Losses in Tanks* 241-C-201, -202 and -204, 65950-87-517, Westinghouse Hanford Company, Richland, Washington.
- Groth, D. R., and G. C. Owens, May 15, 1987, Internal Memorandum to J. H. Roecker, Tank 103-A Integrity Evaluation, Rockwell Hanford Operations, Richland, Washington.
- (k) Dunford, G. L., July 8, 1988, Internal Memorandum to R. K. Welty, Engineering Investigation: Interstitial Liquid Level Decrease in Tank 241-SX-104, 13331-88-416, Westinghouse Hanford Company, Richland, Washington.
- (l) WHC, 1992a, *Tank 241-SX-108 Leak Assessment*, WHC-MR-0300, Westinghouse Hanford Company, Richland, Washington.
- (m) WHC, 1992b, Tank 241-SX-109 Leak Assessment, WHC-MR-0301, Westinghouse Hanford Company, Richland, Washington.
- (n) WHC, 1992c, Tank 241-SX-115 Leak Assessment, WHC-MR-0302, Westinghouse Hanford Company, Richland, Washington.
- (0) WHC, 1992d, Occurrence Report, Apparent Decrease in Liquid Level in Single Shell Underground Storage Tank 241-T-101, Leak Suspected; Investigation Continuing, RL-WHC-TANKFARM-1992-0073, Westinghouse Hanford Company, Richland, Washington.
- (p) WHC,1990b, A History of the 200 Area Tank Farms, WHC-MR-0132, Westinghouse Hanford Company, Richland, Washington.
- (q) WHC, 1993, Assessment of Unsaturated Zone Radionuclide Contamination Around Single-Shell Tanks 241-C-105 and 241-C-106, WHC-SD-EN-TI-185, REV OA, Westinghouse Hanford Company, Richland, Washington.
- (r) WHC, 1994, Occurrence Report, Apparent Liquid Level Decrease in Single Shell Underground Storage Tank 241-T-111; Declared an Assumed Re-Leaker, RL-WHC-TANKFARM-1994-0009, Westinghouse Hanford Company, Richland, Washington.
- (s) HNF, 1998, Agnew, S. F., and R. A. Corbin, August 1998, Analysis of SX Farm Leak Histories Historical Leak Model (HLM), HNF-3233, Rev. 0, Los Alamos National Laboratory, Los Alamos, New Mexico.

5.0 MISCELLANEOUS UNDERGROUND STORAGE TANKS AND SPECIAL SURVEILLANCE FACILITIES

Table 5-1. East and West Area Miscellaneous Underground Storage Tanks and Special Surveillance Facilities.

ACTIVE - still running transfers through the associated diversion boxes or pipeline encasements						
TF2124 ·		Receives Waste	Waste			
Facility	Location	From:	(Gallons)	Monitored By:	Remarks	
EAST AREA			,			
241-A-302-A	A Farm	A-151 DB	662	SACS/ENRAF/TMACS		
241-ER-311	B Plant	ER-151, ER-152 DB	1825	SACS/ENRAF/Manual		
241-AZ-151	AZ Farm	AZ-702 Condensate	6971	SACS/ENRAF/TMACS	Volume changes daily - pumped to AZ-101 or AY-102 as needed	
241-AZ-154	AZ Farm		25	SACS/MT		
244-BX-TK-SMP	BX Complex	DCRT - Receives from several farms	9588	SACS/MT	Receives transfers and is pumped as needed	
244-A-TK/SMP	A Complex	DCRT - Receives from several farms	8510	MCS/SACS/WTF	WTF - Receives transfers and is pumped as needed	
A-350	A Farm	Collects drainage	451	MCS/SACS/WTF	WTF (uncorrected), pumped as needed	
AR-204	AY Farm	Tanker trucks from various facilities	925	DIP TUBE		
A-417	A Farm		1176	SACS/WTF	WTF	
CR-003-TK-SMP	C Farm	DCRT	2146	ZIP CORD	Zip cord installed; MT removed; more accurate conversion table used	
WEST AREA						
241-TX-302-C	T Plant	TX-154 DB	178	SACS/ENRAF/TMACS		
241-U-301-B	U Farm	U-151, 152, 153, 252 DB	1448	SACS/ENRAF/Manual	Pumped to SY-101, 12/03	
241-UX-302-A	U Plant	UX-154	1720	SACS/ENRAF/Manual	Rain intrusion 2/03; recalibration caused decrease 6/03	
241-S-304	S Farm	S-151 DB	135	SACS/ENRAF/Manual	Sump not alarming	
244-S-TK/SMP	S Farm	From SSTs for transfer to SY-102	9695	SACS/Manual	WTF	
244-TX-TK/SMP	TX Farm	From SSTs and PFP for transfer to SY-102	15361	SACS/Manual	Received from 241-Z, tank D-5, 11/04	
Vent Station Catch Tank		Cross Site Transfer Line	507	SACS/Manual	MT. Rain intrusion, 1/03	
		Total A	ctive Facilitie	es - 17		

LEGEND:	
DB	Diversion Box
DCRT	Double-Contained Receiver Tank
ENRAF, MT, Zip Cord	Surface Level Measurement Devices
MCS	Monitor and Control System
Manual	Not connected to any automated system
O/S	Out of Service
PFP	Plutonium Finishing Plant
SACS	Surveillance Automated Control System
SST	Single-Shell Tank
TMACS	Tank Monitor and Control System
WTF	Weight Factor (can be recorded as WTF, WTF [uncorrected] or CWF [uncorrected])

Table 5-2. East Area Inactive Miscellaneous Underground Storage Tanks and Special Surveillance Facilities.

INACTIVE - No longer receiving waste transfers - currently managed by Tank Farm Contractor						
Facility	Location	Received Waste From:	Waste (Gallons)	Monitored By:	Remarks	
209-E-TK-111	209 E Bldg.	Decon Catch Tank	Unknown	NM	Removed from service 1988	
241-A-302-B	A Farm	A-152 DB	6071	SACS/MT	Isolated 1985, Project B-138, Interim Stabilized 1990, rain intrusion	
241-AX-151	N. of PUREX	PUREX	Unknown	NM	Isolated 1985	
241-AX-152	AX Farm	AX-152 DB	0	SACS/MT	Declared Assumed Leaker, pumped to AY-102, 3/01, no longer being used	
241-B-301-B	B Farm	B-151, 152, 153, 252 DB	22250	NM	Isolated 1985 (1)	
241-В-302-В	B Farm	B-154 DB	4930	NM	Isolated 1985 (1)	
241-BX-302-A	BX Farm	BR-152, BX-153, BXR- 152, BYR-152 DB	840	NM	Isolated 1985 (1)	
241-BX-302-B	BX Farm	BX-154 DB	1040	NM	Isolated 1985 (1)	
241-BX-302-C	BX Farm	BX-155 DB	870	NM	Isolated 1985 (1)	
241-BY-ITS2- TK 1	BY Farm	Vapor condenser	Unknown	NM	Isolated	
241-BY-ITS2- TK 2	BY Farm	Heater Flush Tank	Unknown	NM	Stabilized 1977	
241-C-301-C	C Farm	C-151, 152, 153, 252 DB	10470	NM	Isolated 1985 (1)	
241-ER-311A	SW of B Plant	ER-151 DB	Empty	NM	Abandoned in place 1954	
241-AR Vault	A Complex	Between farms and B Plant	Unknown	NM	Stabilized 8/03, RPP-12051	
241-BXR- TK/SMP-001	BX Farm	Transfer lines	7200	NM	Interim Stabilization 1985 (1)	
241-BXR- TK/SMP-002	BX Farm	Transfer Lines	2180	NM	Interim Stabilization 1985 (1)	
241-BXR- TK/SMP-003	BX Farm	Transfer Lines	1810	NM	Interim Stabilization 1985 (1)	
241-BXR- TK/SMP-004	BX Farm	Transfer Lines	7100	NM	Interim Stabilization 1985 (1)	
		Total East Area Ina	active Faciliti	es - 18		

LEGEND:	
DB	Diversion Box
MT	Surface Level measurement Device
NM	Not Monitored
SACS	Surveillance Automated Control System
TK, SMP	Tank, Sump

⁽¹⁾ WHC-SD-WM-TI-356, Waste Storage Tank Status and Leak Detection Criteria, Rev. 0, September 30, 1988

Table 5-3. West Area Inactive Miscellaneous Underground Storage Tanks and Special Surveillance Facilities.

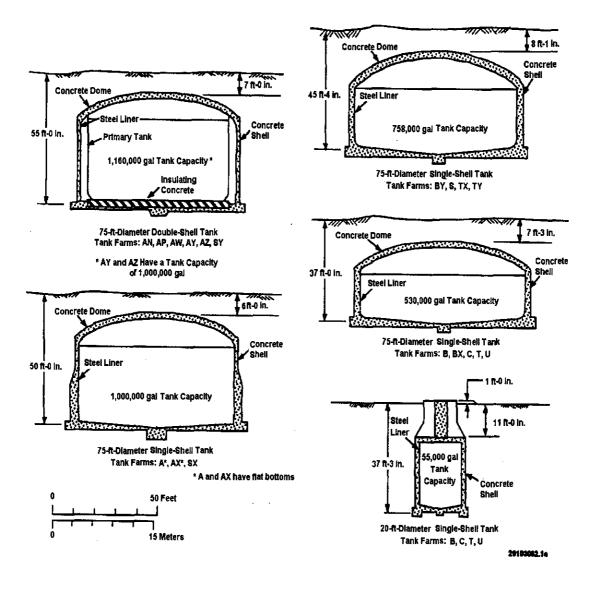
INACTIVE - No longer receiving waste transfers - currently managed by Tank Farm Contractor					
	Waste Monitored				
Facility	Location	Received Waste From:	(Gallons)	By:	Remarks
213-W-TK-1	E. of 213-W	Water Retention Tank	Unknown	NM	Contains only water
	Compactor				
	Facility				
231-W-151-001	N. of Z Plant	231-Z Floor drains	Unknown	NM	Inactive, last data 1974
231-W-151-002	N. of Z Plant	231-Z Floor drains	Unknown	NM	Inactive, last data 1974
240-S-302	S Plant	240-S-151-DB	8113		Assumed Leaker, EPDA 85-04
241-S-302-A	S Farm	241-S-151-DB	0		Assumed Leaker TF-EFS-90-042
	Partially filled	with grout 2/91, determined	to be an Assum	ned Leaker afte	r leak test. No surface level or
	intrusion readir	gs obtainable. S-304 (active			
241-S-302-B	SX Farm	S Encasements	Empty	NM	Isolated 1985 (1)
241-SX-302 (SX-304)	SX Farm	SX-151 DB, 151 TB	Unknown	NM	Isolated 1987
241-T-301	T Farm	DB T-151, 151, 153,	Unknown	NM	Isolated 1985 (T-301-B)
		252			
241-TX-302	TX Farm	TX-153 DB	Unknown	NM	Isolated 1985 (1)
241-TX-302-X-B	TX Farm	TX Encasements	Unknown	NM	Isolated 1985 (1)
241-TX-302-B	E. of TX	TX-155 DB	3253	SACS/	New ENRAF installed 9/02
	Farm			ENRAF	
241-TX-302-B(R)	E. of TX	TX-155 DB	Unknown	NM	Isolated, replaced TX-302-B
	Farm				
241-TY-302-A	TY Farm	TX-153 DB	Unknown	NM	Isolated 1985 (1)
241-TY-302-B	TY Farm	TY Encasements	Empty	NM	Isolated 1985 (1)
241-Z-8	E. of Z Plant	Recuplex waste	Unknown	NM	Isolated, 1974, 1975
242-T-135	T Evaporator	T Evaporator	Unknown	NM	Isolated
242-TA-R1	T Evaporator	Z Plant waste	Unknown	NM	Isolated
243-S-TK-1	NW of S	Personnel Decon.	Empty	NM	Isolated
	Farm	Facility			
244-TXR-TK/SMP-	TX Farm	Transfer lines	Unknown	NM	Interim Stabilized, MT removed
001					1984 (1)
244-TXR-TK/SMP-	TX Farm	Transfer lines	Unknown	NM	Interim Stabilized, MT removed
002					1984 (1)
244-TXR-TK/SMP-	TX Farm	Transfer lines	Unknown	NM	Interim Stabilized, MT removed
003					1984 (1)
244-UR-001 Vault TK	U Farm	Tank, Sump and Cell	4220	NM	Stabilized 1985
244-UR-002 Vault TK	U Farm	Tank, Sump and Cell	1400	NM	Stabilized 1985
244-UR-003 Vault TK	U Farm	Tank, Sump and Cell	5996	NM	Stabilized 1985
244-UR-004 Vault TK	U Farm	Tank, Sump and Cell	Empty	NM	Stabilized 1985
		Total East Area Inacti		25	

LEGEND:	
DB, TD	Diversion Box, Transfer Box
FIC, ENRAF	Surface Level Measurement Devices
MT	Manual Tape - Surface Level measurement Device
NM	Not Monitored
SACS	Surveillance Automated Control System
TK, SMP	Tank, Sump
SACS	Surveillance Automated Control System
TK, SMP	Tank, Sump

⁽¹⁾ WHC-SD-WM-TI-356, Waste Storage Tank Status and Leak Detection Criteria, Rev. 0, September 30, 1988

APPENDIX A - TANK CONFIGURATION AND FACILITIES CHARTS

Figure A-1. High Level Waste Tank Configurations



Surface Level Probe (FIC, ENRAF and Manual Tape) **Solids Level Detector** Dome Elevation Bench Mark **Camera Observation Port** Exhaust Stack Continuous Air Flow Monitor Annulus Pump Pit **Leak Detection Pit** Temperature Thermocouple Assembly るとうともなけれるない。 Primary Steel Liner Operating Liquid Level Secondary Steel Liner Supernatar Pump Pit Sludge Reinforced Concrete Tank Concrete Steel Liners Annulus G05010040.4

Figure A-2. Double-Shell Tank Instrumentation Configuration

Liquid Observation Well Camera Surface Level Probe (FIC, ENRAF and Manual Tapes) Observation Point Solids Level Detector Dome Elevation Bench Mark Temperature Thermocouple Center Breather Filter (Exhausters used during in-tank operations) **Pump Pit** Detection Assembly Drywell T. STREET, Reinforced Saltwell Screen Concrete Tank Supernatant Steel Liner Saltcake and/or Sludge Interstitial Liquid Level Leak Detection Drywells A&SX Farms Only G05010040.3

Figure A-3. Single-Shell Tank Instrumentation Configuration

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